

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21006 - L2 Version 3
Chandra X-Ray Center

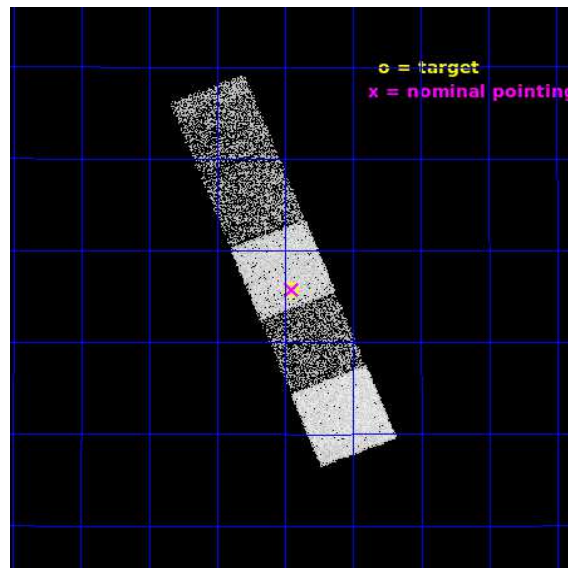
L2 Processing Date : Oct 26 2020

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1 Front

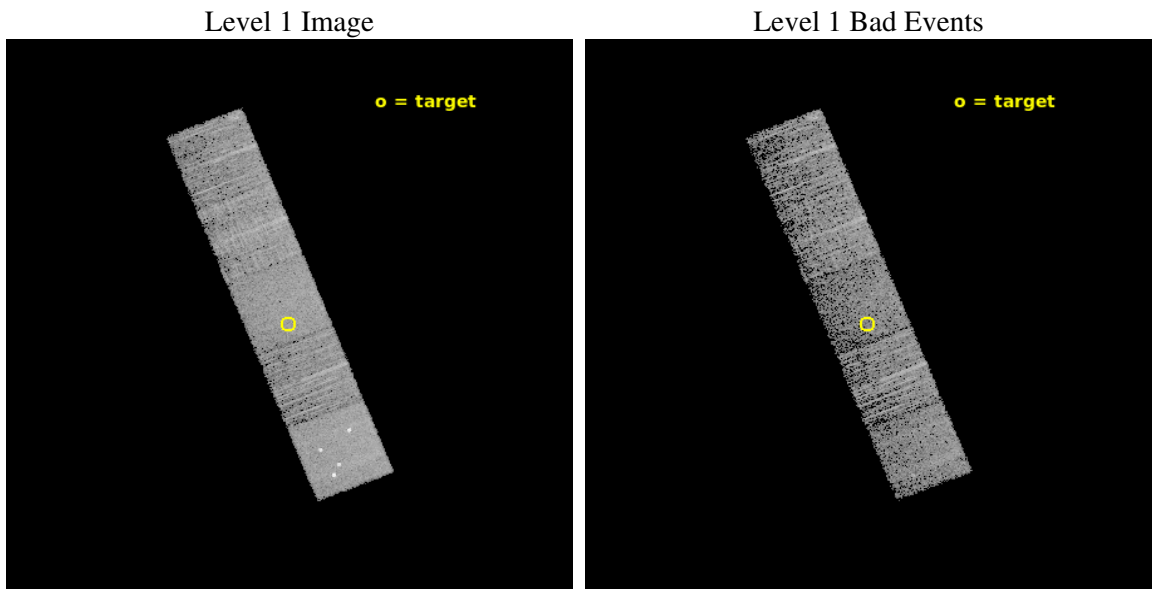
seq_num	703647	Sequence number
obs_id	21006	Observation id
title	LOW SURFACE BRIGHTNESS GALAXIES AND THE BLACK HOLE OCCUPATION FRACTION	Proposal title
observer	Elena Gallo	Principal investigator
object	LSBC F570-04	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	168.23875	Observer's specified target RA [deg]
dec_targ	18.761583	Observer's specified target Dec [deg]
ra_nom	168.23770927706	Nominal RA [deg]
dec_nom	18.76240948632	Nominal Dec [deg]
roll_nom	248.17962596457	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3329.4000257254	Sum of GTIs [s]
livetime	3285.8989633206	Livetime [s]
ontime5	3329.4000257254	Sum of GTIs [s]
ontime6	3329.4000257254	Sum of GTIs [s]
ontime7	3329.4000257254	Sum of GTIs [s]
ontime8	3329.4000257254	Sum of GTIs [s]
ontime9	3329.3934582472	Sum of GTIs [s]
l2events	39703	Number of level 2 events



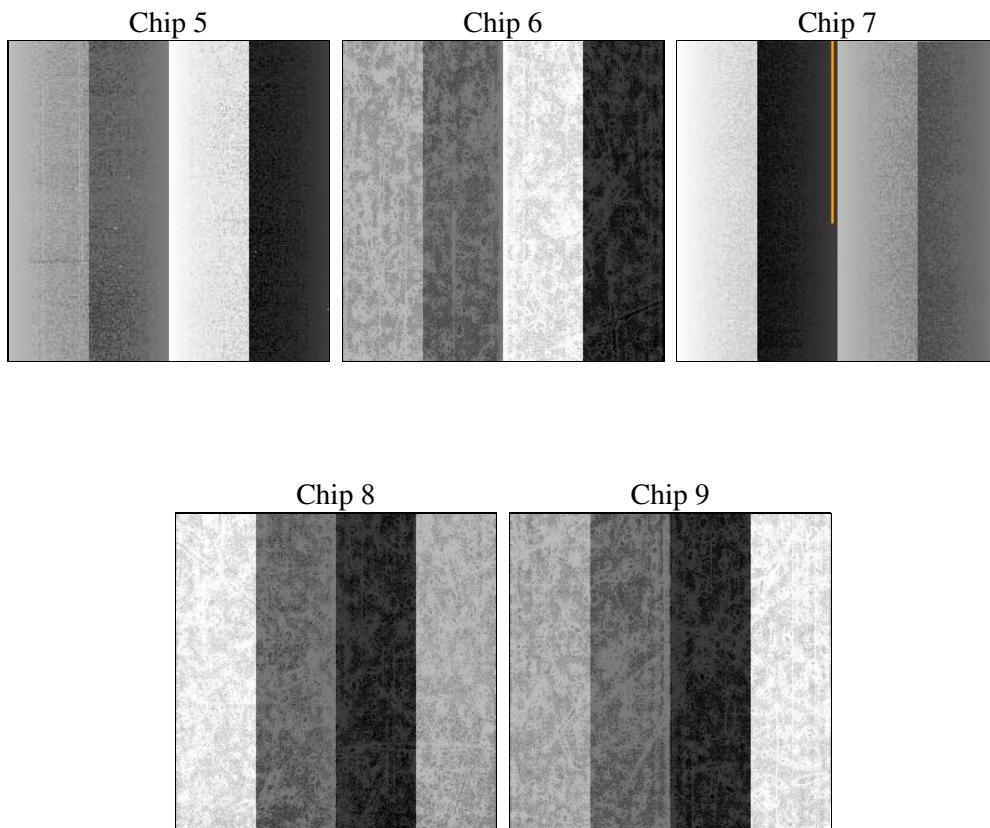
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3279.976000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	3329.4000257254	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	3329.4000257254	Sum of GTIs [s]
date	2020-10-26T07:30:40	Date and time of file creation	ontime6	3329.4000257254	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	3329.4000257254	Sum of GTIs [s]
			ontime8	3329.4000257254	Sum of GTIs [s]
			ontime9	3329.3934582472	Sum of GTIs [s]
			l1events	167965	Number of level 1 events

2.1.4 Events

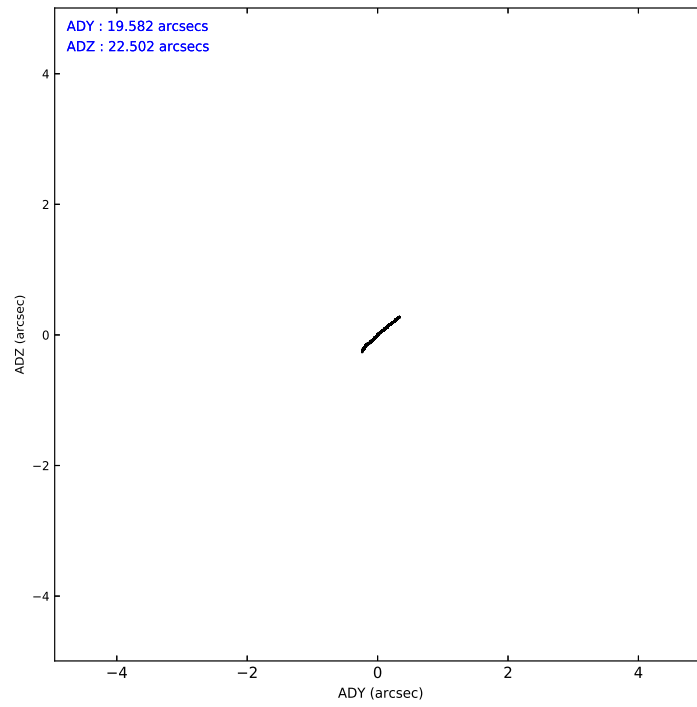
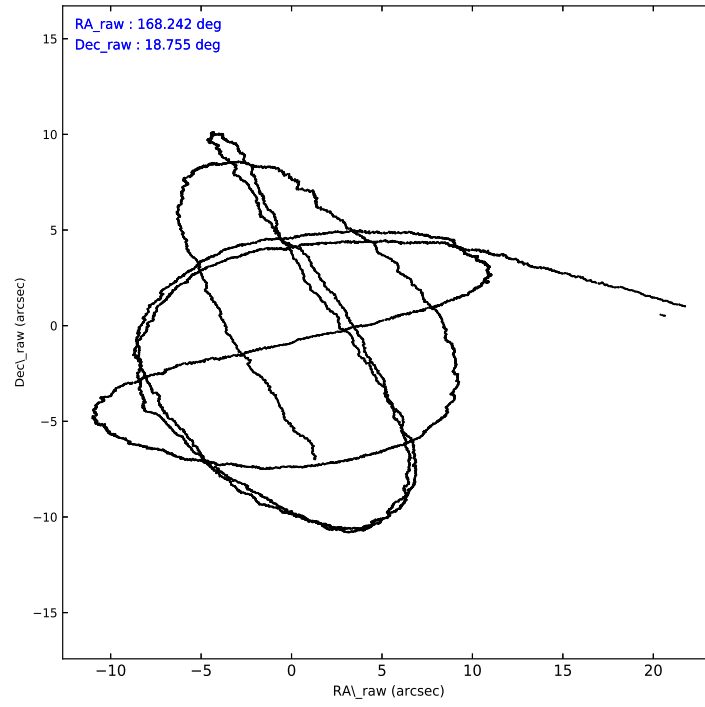
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	44677	28165	33004	35223	26896
rejected events	22149	25343	19077	26454	23796
rejected %	49%	89%	57%	75%	88%

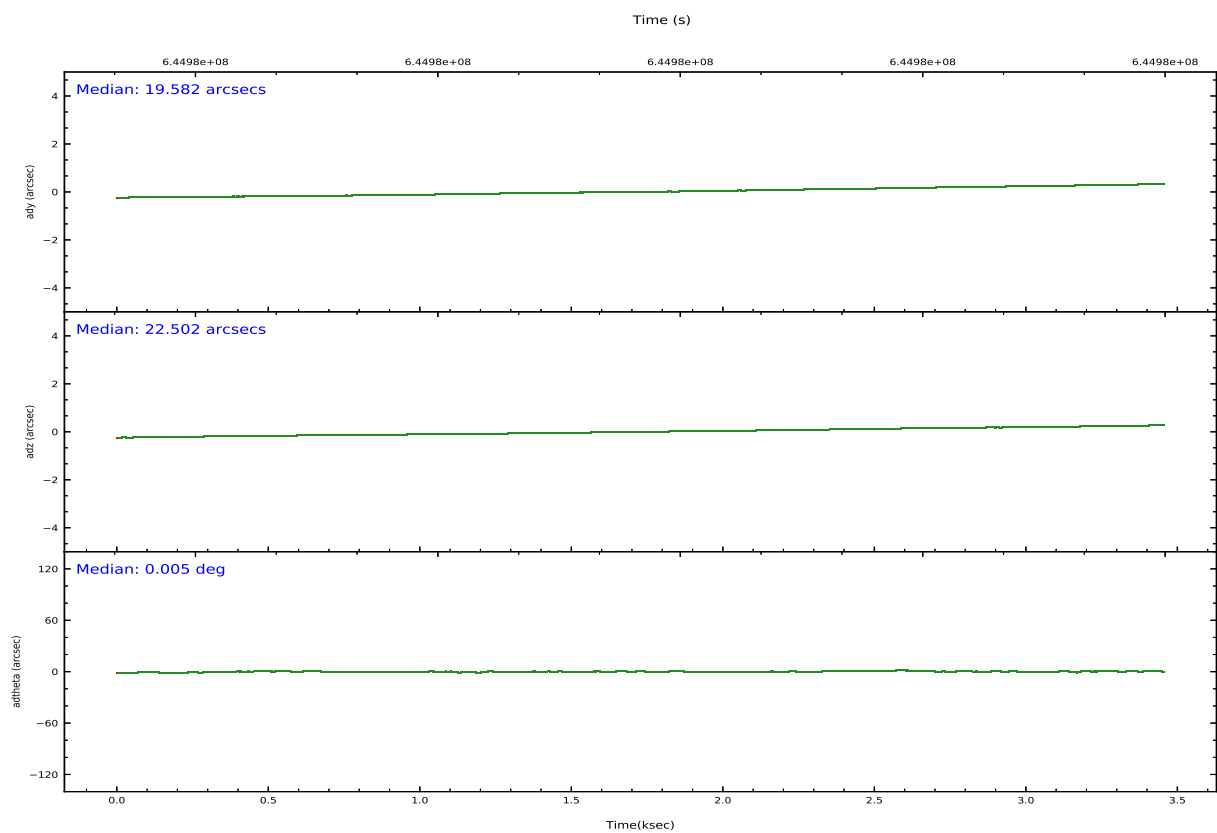
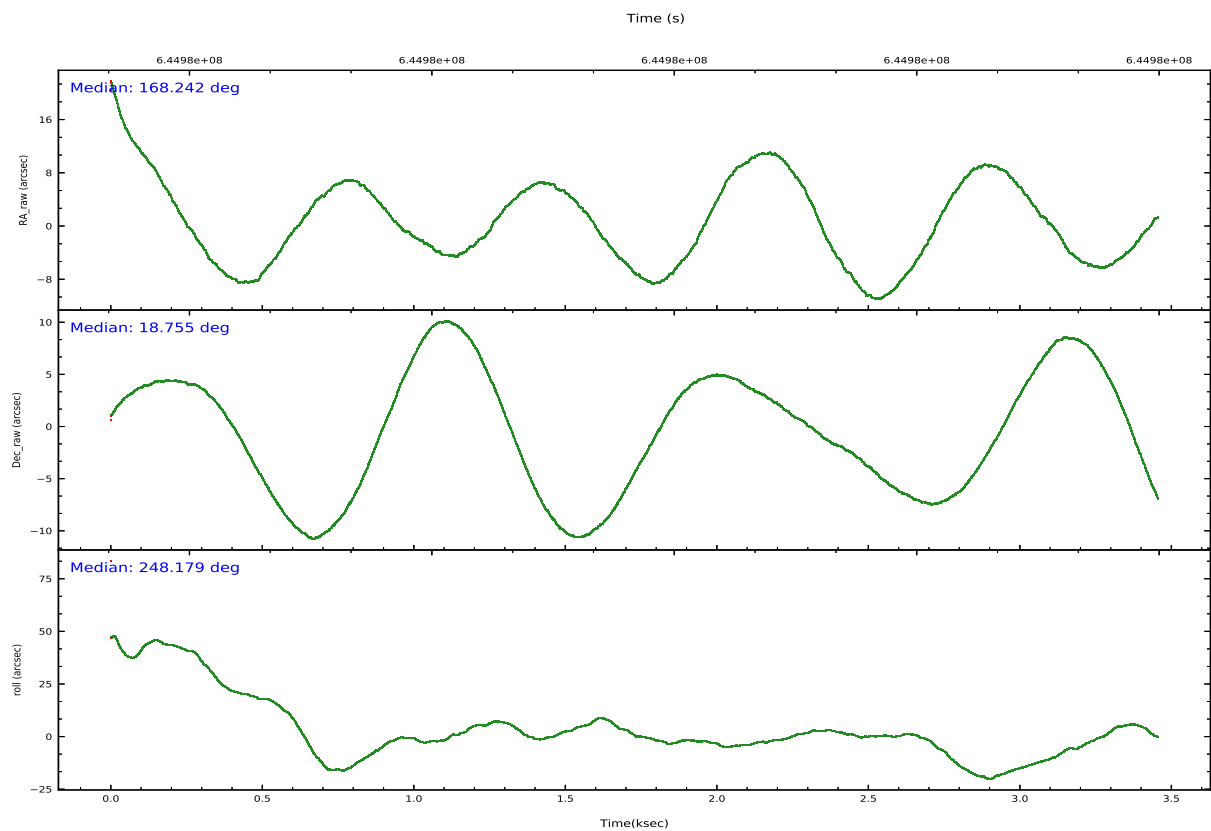
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	3632	889	1168	2316	1076
	8%	3%	3%	6%	4%
grade 1 events	179	15	43	26	16
	0%	0%	0%	0%	0%
grade 2 events	6810	716	2933	2316	702
	15%	2%	8%	6%	2%
grade 3 events	566	256	1052	878	318
	1%	0%	3%	2%	1%
grade 4 events	550	282	1162	826	296
	1%	1%	3%	2%	1%
grade 5 events	2576	1110	3282	1830	1385
	5%	3%	9%	5%	5%
grade 6 events	11006	683	7637	2440	719
	24%	2%	23%	6%	2%
grade 7 events	19358	24214	15727	24591	22384
	43%	85%	47%	69%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	168.237154	168.23770927706	CCD I2 on	N	N
[deg] Pointing Dec	18.781749	18.76240948632	CCD I3 on	N	N
[deg] Pointing Roll	248.053994	248.17962596457	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	644977516.184000	644976618.95496	CCD S5 on	O2	Y
Observation start date	2018-06-10T00:24:07	2018-06-10T00:10:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	644980796.184000	644981371.88025	On-chip summing requested	N	N
Observation end date	2018-06-10T01:18:47	2018-06-10T01:29:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



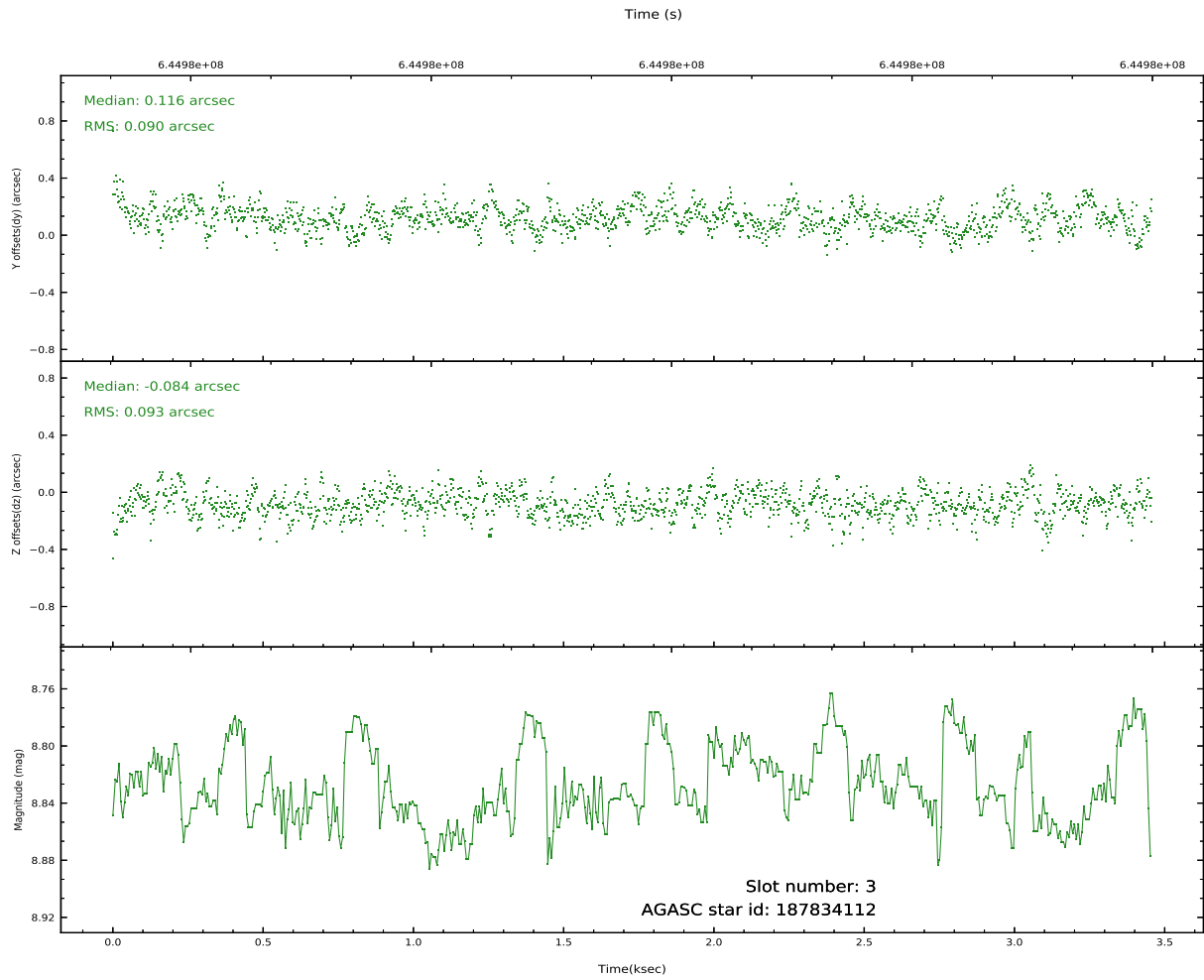
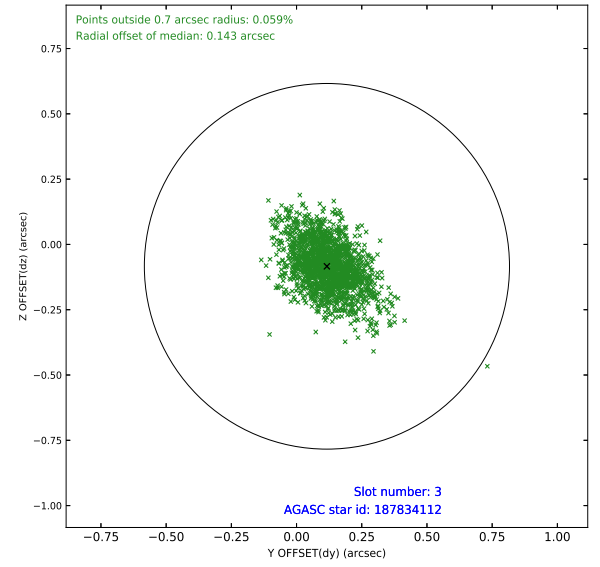
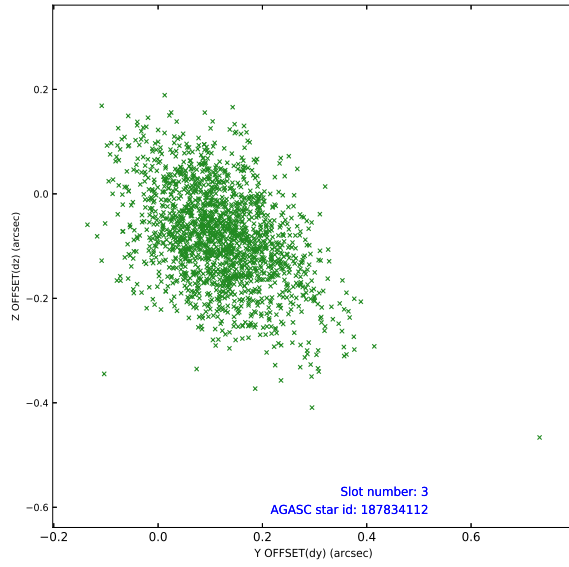


Slot Statistics

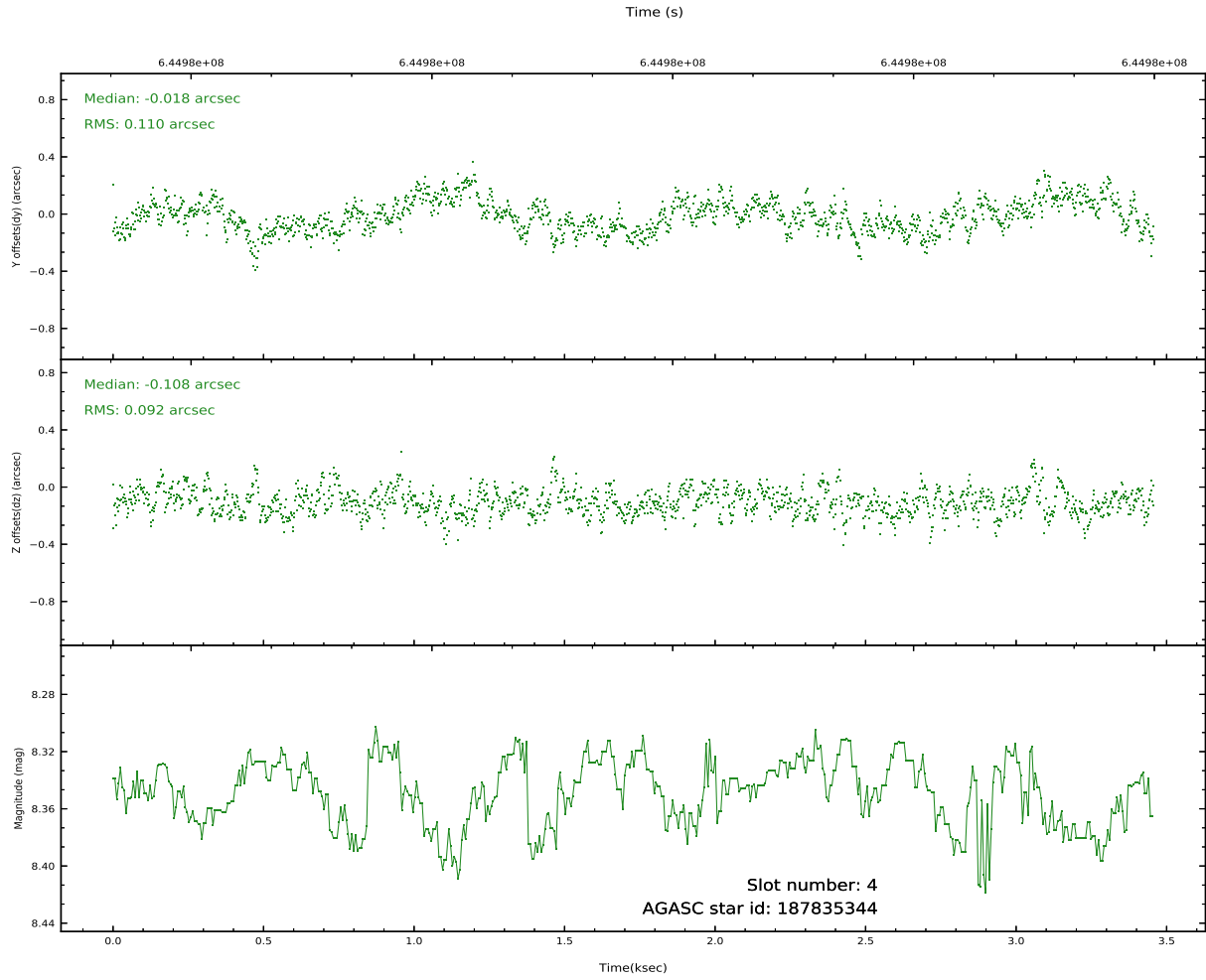
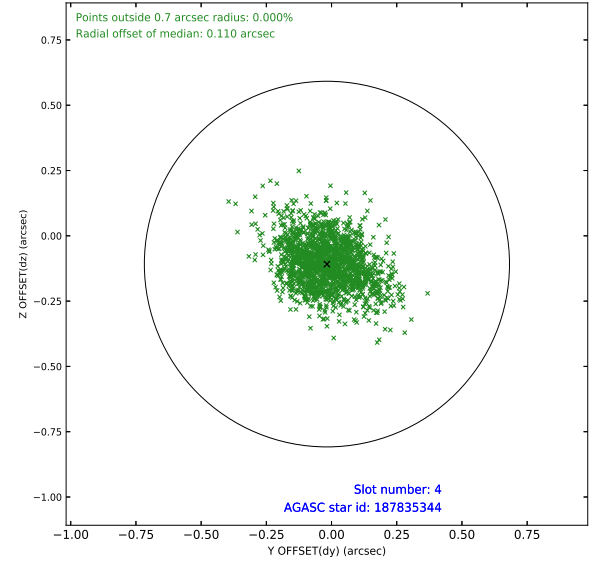
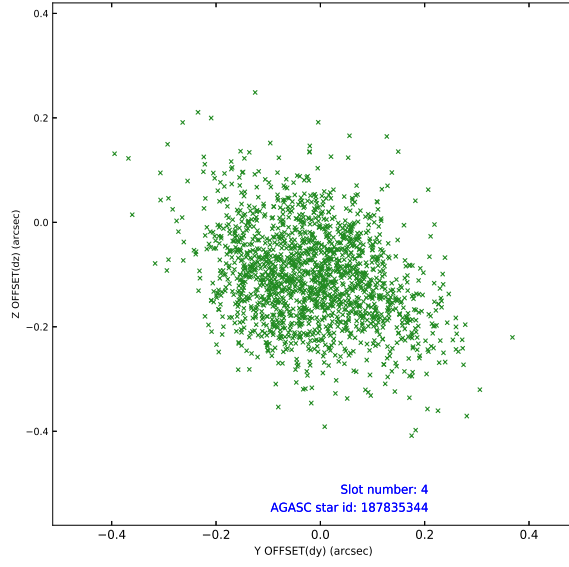
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	844	1.000	0.133	-0.131	0.008	0.013	0.000000	0.000000	-772.86	-1744
1	FID		ACIS-S-4	7.18	844	1.000	0.078	-0.029	0.009	0.015	0.000000	0.000000	2139.84	162
2	FID		ACIS-S-5	7.17	844	1.000	-0.242	0.168	0.009	0.014	0.000000	0.000000	-1823.42	158
3	GUIDE	used	187834112	8.83	1686	1.000	0.116	-0.084	0.133	0.231	167.727723	18.372280	2016.91	-1064
4	GUIDE	used	187835344	8.35	1686	1.000	-0.018	-0.108	0.149	0.253	167.918164	18.692218	707.44	-888
5	GUIDE	used	188356672	9.03	1683	1.000	-0.129	0.051	0.178	0.297	168.444668	18.593396	365.10	908
6	GUIDE	used	188629048	8.02	1686	1.000	0.042	0.144	0.118	0.215	168.163892	18.886841	-256.24	-372
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

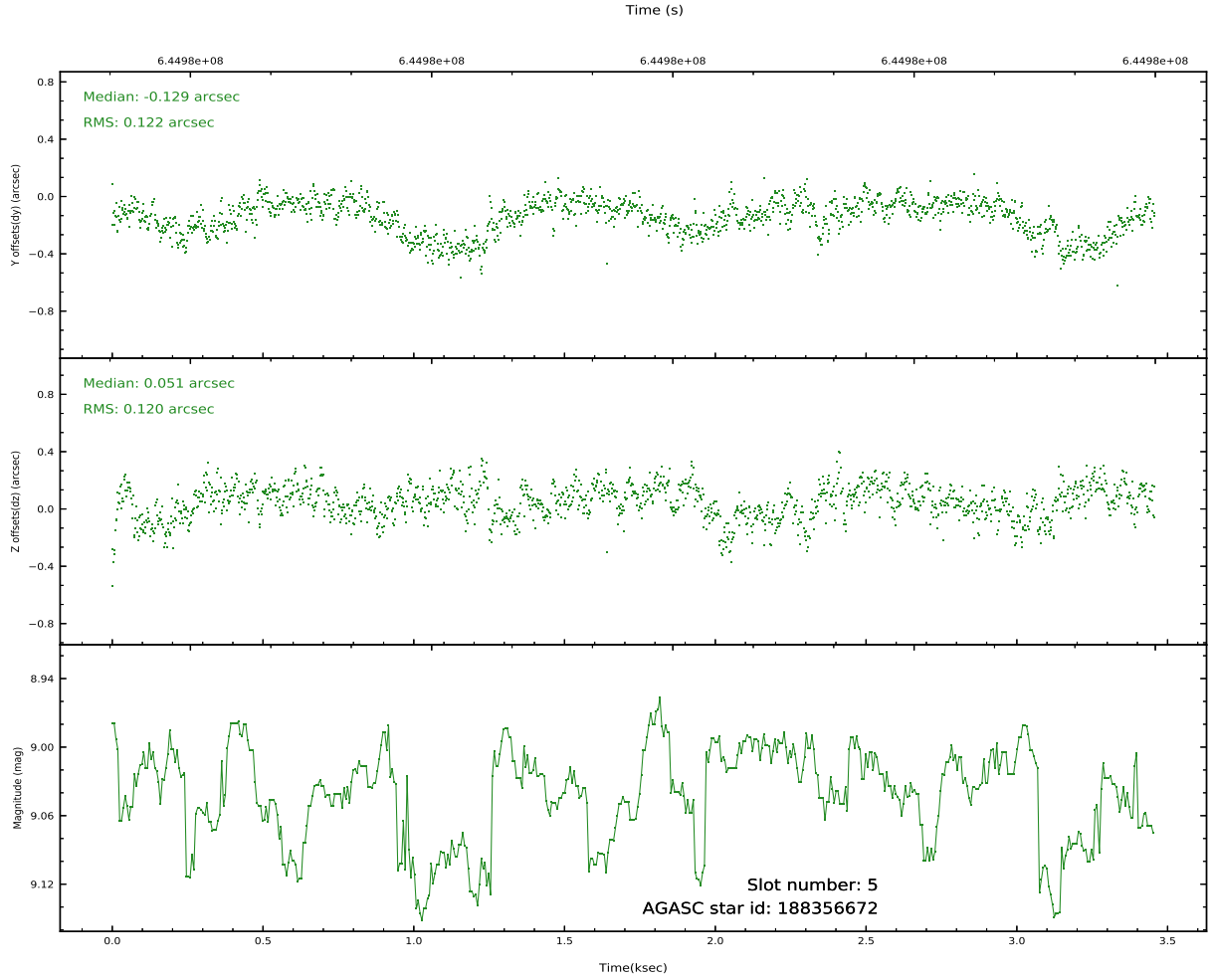
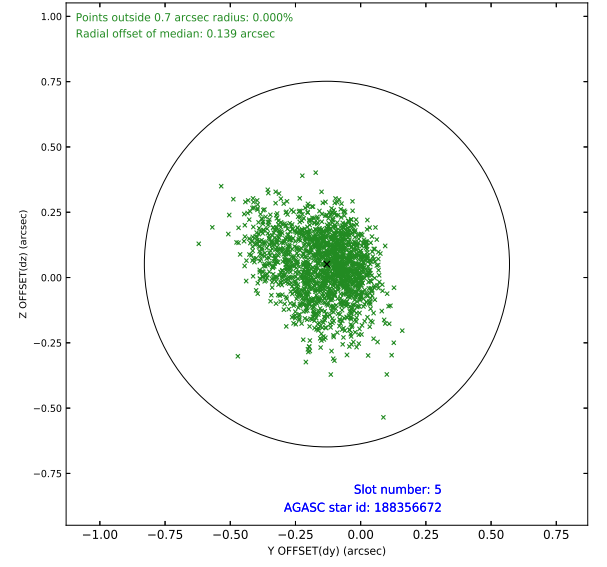
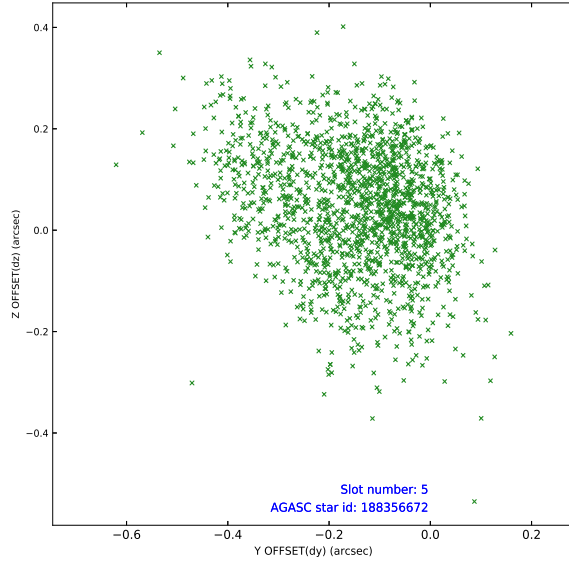
2.4.1 Slot 3



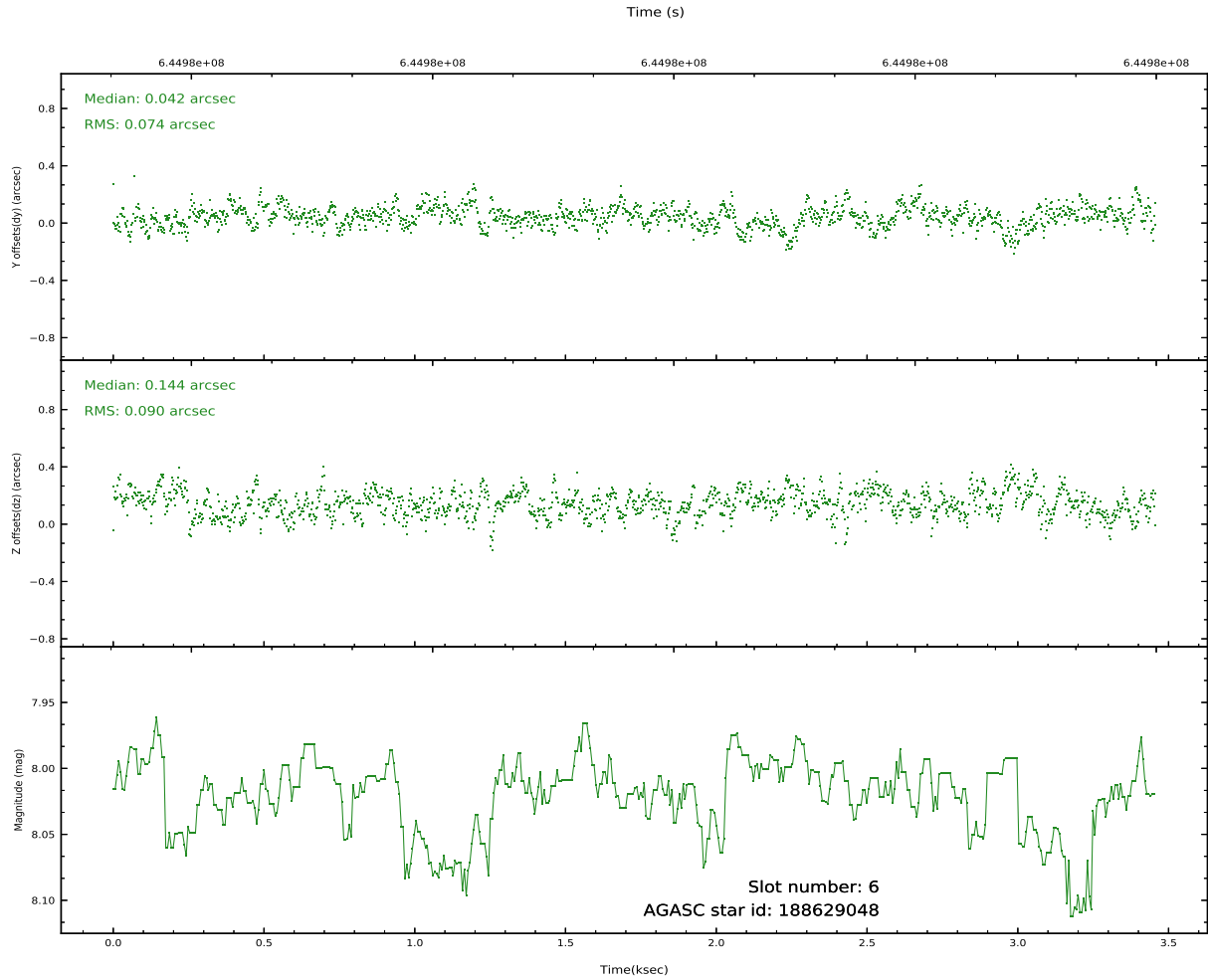
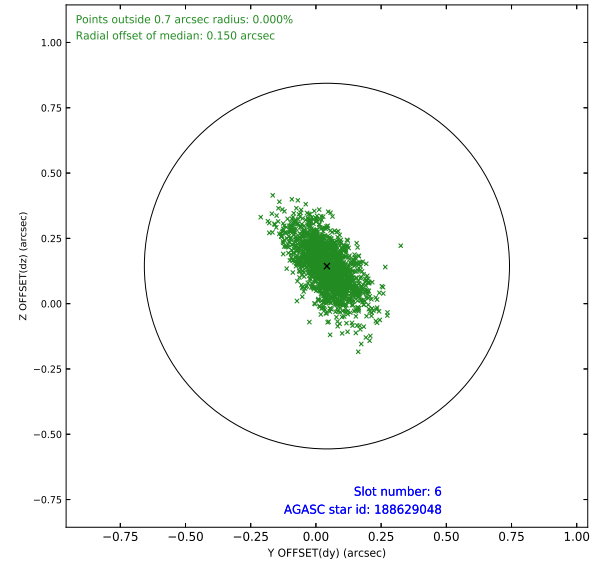
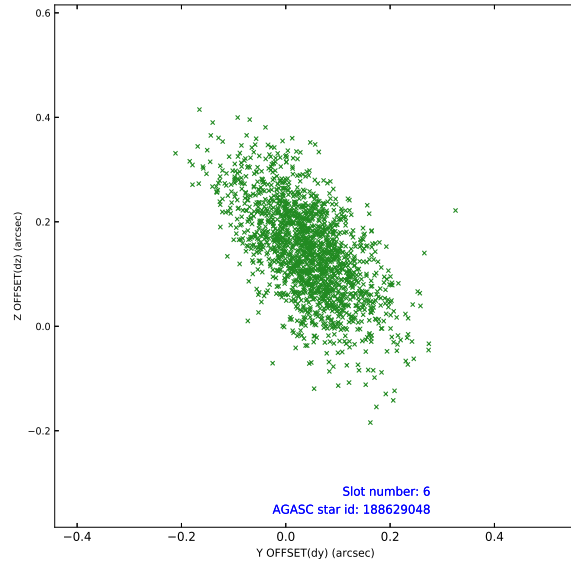
2.4.2 Slot 4



2.4.3 Slot 5

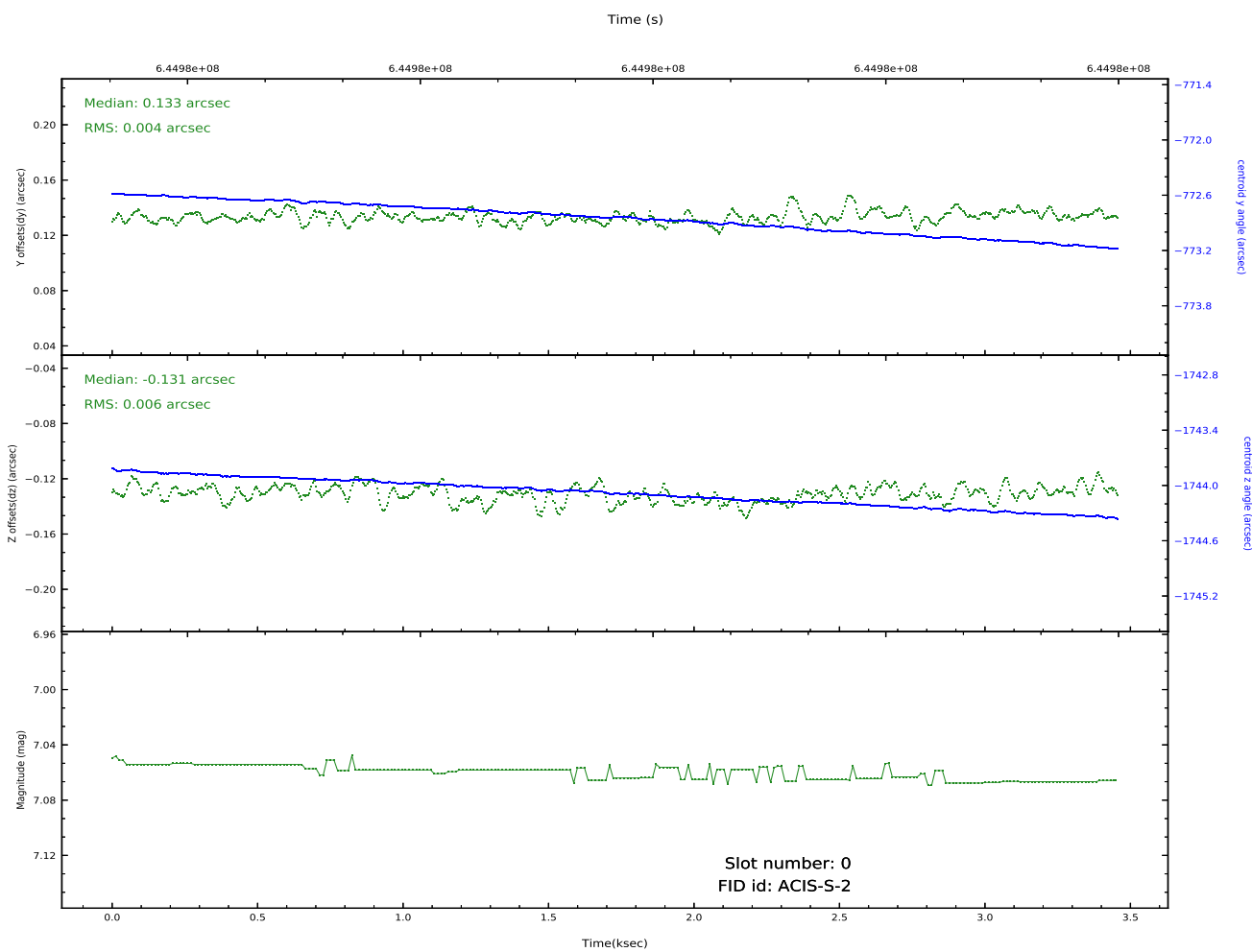
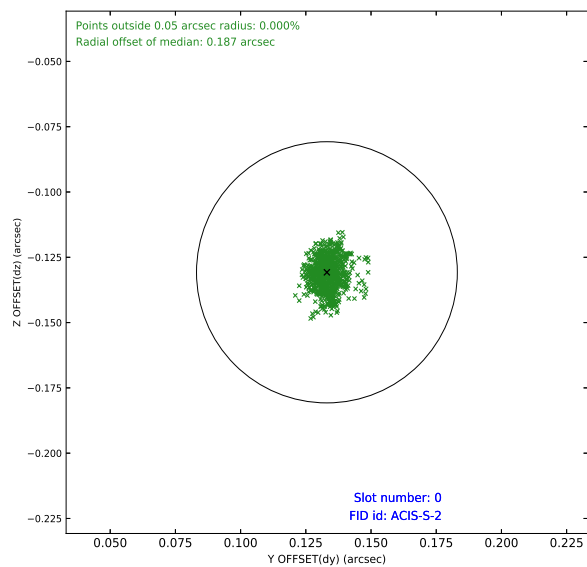
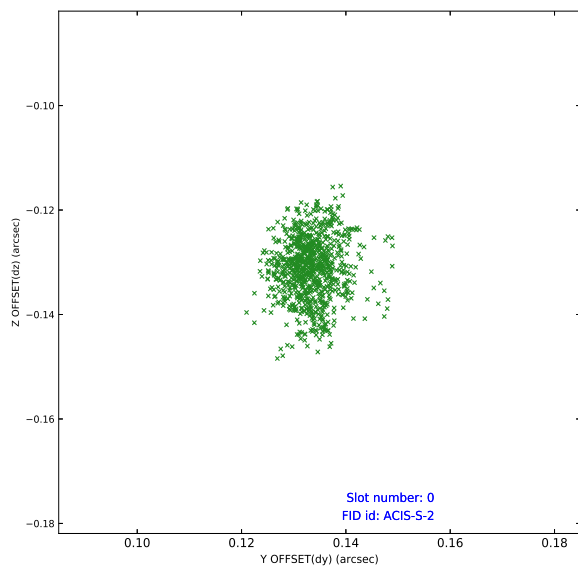


2.4.4 Slot 6

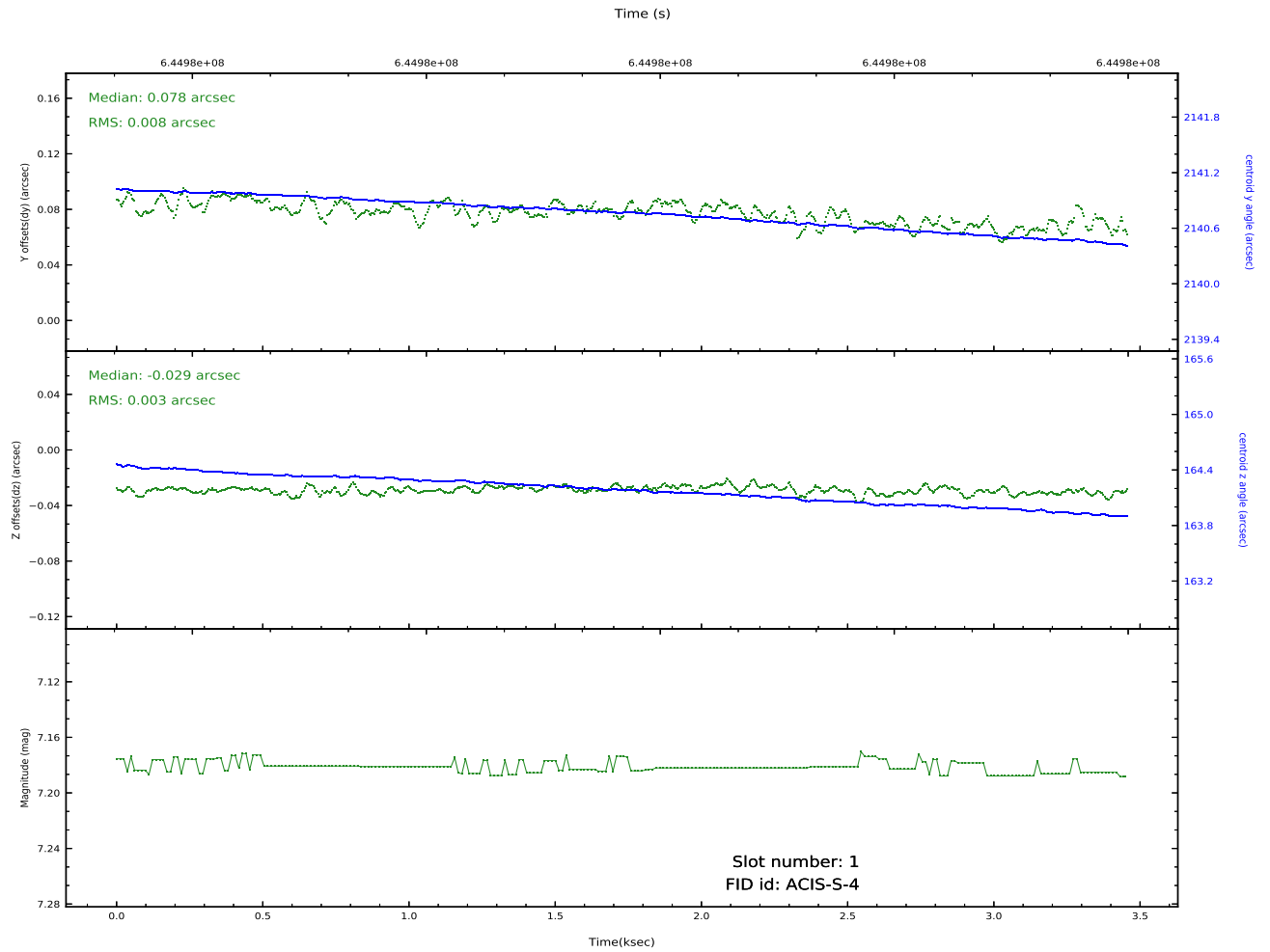
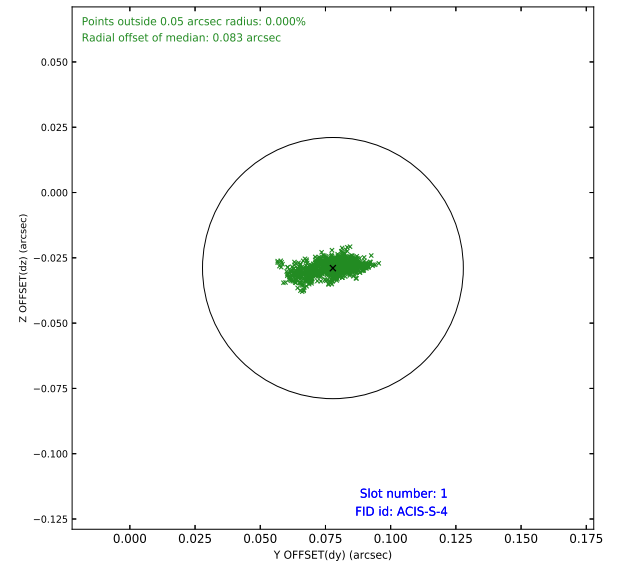
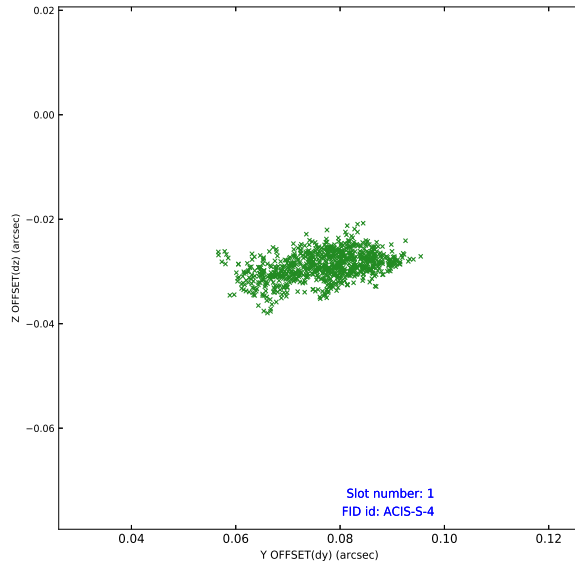


2.5 FID Slots

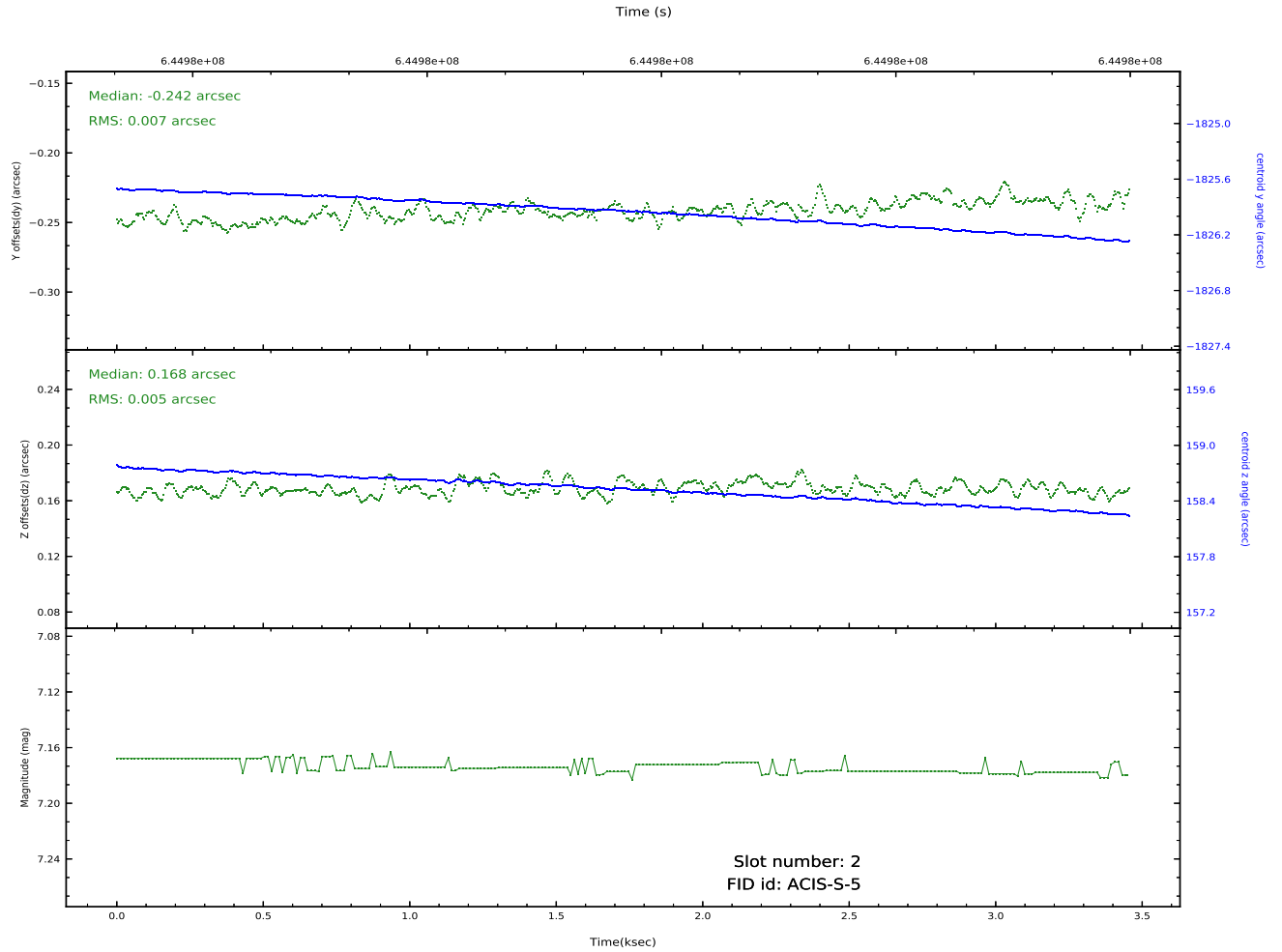
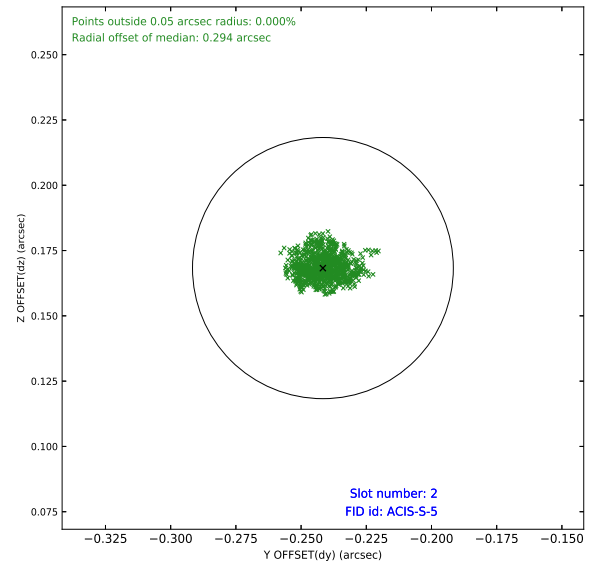
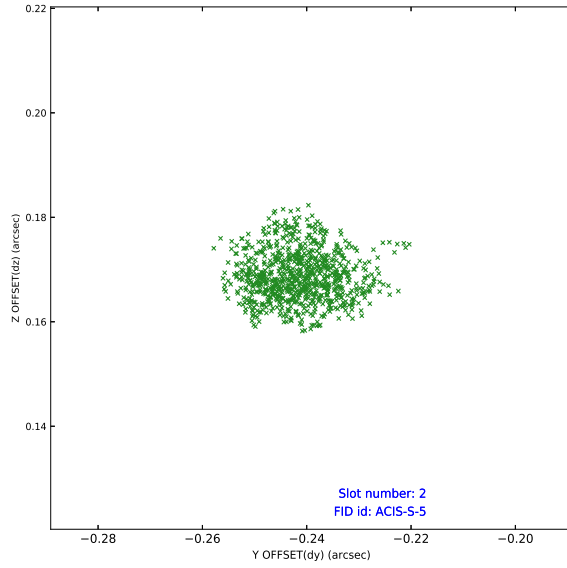
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.3294000257254

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.